

Sketch 1

What is Claimed Is:

1. Driving device (1), mainly for the windshield wiper assembly of a motor vehicle, which has
 - a housing (3),
 - an electric motor (2) located in a housing (3) with a pivoted armature (4),
 - a gear unit located in the housing (3) with a worm shaft (6) located on a section of the armature (4), and
 - an axial thrust generating device (8) to compensate for the axial free play of the armature (4),
characterized in that one end (5) of the armature (4) is supported at the housing (3) through a support bearing (7) and that the axial thrust generating device (8) possesses a tapered sliding member (9) which is supported in the housing (3) movable in the radial direction relative to the armature (4) and is supported against the armature shaft so that axial force can be applied to the armature shaft (4) in the direction of the support bearing (7) by moving the tapered sliding member (9).
2. Driving device (1) in accordance with claim 1 wherein the armature (4) is supported in a roller bearing (13) with an inner race (13') located on the armature (4) and an outer race (13') located in one of the gear housing (3) or in the motor housing.
3. Driving device (1) in accordance with claim 2, wherein the roller bearing (13) is located between the worm shaft (6) and the electric motor (2).
4. Driving device (1) in accordance with claim 2 or 3, wherein the outer race (13') is supported in the housing (3) so that it is

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movable axially and wherein the tapered sliding member (9) imparts an axial force to the outer race (13') in the direction of the support bearing (7).

5. Driving device (1) in accordance with claim 4 wherein the fixed inner race (13') is attached to the armature (4), so that it can transfer an axial force acting on the outer race (13') to the armature (4).

6. Driving device (1) in accordance with claim 5 wherein a fixed thrust washer is located on the armature (4) on the side of the roller bearing facing away from the tapered sliding member (9).

7. Driving device (1) in accordance with claim 6 wherein the thrust washer (14) is formed as a clamp ring which is located on the armature (14) in an annular groove (15) formed in the armature (14).

8. Driving device (1) in accordance with one of the claims 1 to 7, wherein the tapered sliding member (9) is formed basically U-shaped, where the armature (4) runs in the gap between the two parallel legs of the U.

9. Driving device (1) in accordance with one of the claims 2 to 8, wherein the housing (3) possesses a collar-shaped area (11) which extends radially inward, through which the armature (4) runs and on which the tapered sliding member (9) is supported.

10. Driving device (1) in accordance with claim 9 wherein the surface of the collar-shaped area (11) on which the tapered sliding member (9) is supported has a bevel which matches the bevel on the surface of the tapered sliding member (9) on which the latter is supported in the collar-shaped area (11).

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11. Driving device (1) in accordance with one of the claims 1-10, wherein a displacing force can be applied to the tapered sliding member (9) by means of a spring element (12).

12. Driving device (1) in accordance with claim 11 wherein the spring element (12) is constructed as a helical spring.

13. Driving device (1) in accordance with claim 11 wherein the spring element (12) is constructed as a leaf spring.

14. Driving device (1) in accordance with one of the claims 1 to 13 wherein the spring element (12) is constructed as a rubber spring.

15. Driving device (1) in accordance with one of the claims 11 to 13 wherein the spring element (12) is constructed as a plastic spring.

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